

CLAIMS

We Claim:

1. A hand-held device comprising:

a circuit board;

a processor means attached to said circuit board;

a tracking means for sensing movements of the device wherein the tracking means contains an accelerometer chip mounted at an angle with respect to the circuit board.

2. A hand held device as recited in claim 1 wherein the device is a personal digital assistant (PDA).

3. A hand held device as recited in claim 1 wherein the tracked movements are used to control a display.

4. A hand held device as recited in claim 1 wherein the angle formed between the accelerometer chip and the circuit board is 19 degrees.

5. A hand held device as recited in claim 1 wherein the orientation of the certain portion displayed is redefined in response to a request by a user.

6. A method of mounting an integrated circuit chip onto a circuit board comprising the steps of providing a circuit board onto which electrical components will be mounted; and mounting an accelerometer chip onto said circuit board so that an angle is formed between said circuit board and said accelerometer chip.

7. A computer implemented method as recited in claim 6 wherein the accelerometer chip is mounted at an angle of 19 degrees with respect to the circuit board.

8. A computer implemented method as recited in claim 6 wherein acceleration may be detected in more than one plane of motion.

9. A computer implemented method as recited in claim 6 wherein the scalability feature is controlled by user input separate from tracked movement of the display device.

10040254-010402

- 5 10. A computer implemented method as recited in claim 6 wherein the navigation capability of the physical map includes a scalability feature allowing adjustment of the scalability of the physical map in order to provide a viewer of the display device views of the physical map having different magnifications
- 10 11. A method of measuring acceleration in more than one plane of motion comprising the steps of ; providing a circuit board on which electrical components will be mounted, mounting an accelerometer chip onto said circuit board wherein an angle is formed between the circuit board and the accelerometer chip.
12. A method as recited in claim 11 further comprising the step of mounting a single accelerometer chip at an angle of 19 degrees with respect to a circuit board.
- 15 13. A method as recited in claim 11 wherein the single accelerometer chip is capable of sensing motion in more than one plane due to said angle.
14. A method as recited in claim 11 wherein the accelerometer produces signals used to control an electrical device.
15. A method as recited in claim 14 wherein the device is a personal digital assistant (PDA).
- 20 16. A hand-held device comprising; a circuit board that contains a slanted surface; and an accelerometer chip mounted on said slanted surface.
17. A hand-held device as in claim 16,
18. A hand-held device as in claim 16, wherein the device is a hand-held personal digital assistant (PDA).
- 25 19. A computer implemented method as recited in claim 15 wherein the hand-held computer device is a personal digital assistant (PDA).
20. A computer implemented method as recited in claim 16 wherein the PDA has handwriting recognition capability.